Google

Exam Questions Professional-Cloud-Network-Engineer

Google Cloud Certified - Professional Cloud Network Engineer

NEW QUESTION 1
You are trying to update firewall rules in a shared VPC for which you have been assigned only Network Admin permissions. You cannot modify the firewall rules. Your organization requires using the least privilege necessary.
Which level of permissions should you request?

A. Security Admin privileges from the Shared VPC Admin.
B. Service Project Admin privileges from the Shared VPC Admin.
C. Shared VPC Admin privileges from the Organization Admin.
D. Organization Admin privileges from the Organization Admin.

Answer: A

Explanation:
A Shared VPC Admin can define a Security Admin by granting an IAM member the Security Admin (compute.securityAdmin) role to the host project. Security Admins manage firewall rules and SSL certificates.

NEW QUESTION 2
You built a web application with several containerized microservices. You want to run those microservices on Cloud Run. You must also ensure that the services are highly available to your customers with low latency. What should you do?

A. Deploy the Cloud Run services to multiple availability zone
B. Create a global TCP load balance
C. Addthe Cloud Run endpoints to its backend service.
D. Deploy the Cloud Run services to multiple region
E. Create serverless network endpoint groups (NEGs) that point to the service
F. Create a global HTTPS load balancer, and attach the serverless NEGs as backend services of the load balancer.
G. Deploy the Cloud Run services to multiple availability zone
H. Create Cloud Endpoints that point to the service
I. Create a global HTTPS load balancer, and attach the Cloud Endpoints to its backend
J. Deploy the Cloud Run services to multiple region
K. Configure a round-robin A record in Cloud DNS.

Answer: B

NEW QUESTION 3
You have deployed a new internal application that provides HTTP and TFTP services to on-premises hosts. You want to be able to distribute traffic across multiple Compute Engine instances, but need to ensure that clients are sticky to a particular instance across both services.
Which session affinity should you choose?

A. None
B. Client IP
C. Client IP and protocol
D. Client IP, port and protocol

Answer: B

NEW QUESTION 4
You converted an auto mode VPC network to custom mode. Since the conversion, some of your Cloud Deployment Manager templates are no longer working. You want to resolve the problem.
What should you do?

A. Apply an additional IAM role to the Google API's service account to allow custom mode networks.
B. Update the VPC firewall to allow the Cloud Deployment Manager to access the custom mode networks.
C. Explicitly reference the custom mode networks in the Cloud Armor whitelist.
D. Explicitly reference the custom mode networks in the Deployment Manager templates.

Answer: D

NEW QUESTION 5
You need to enable Cloud CDN for all the objects inside a storage bucket. You want to ensure that all the object in the storage bucket can be served by the CDN.
What should you do in the GCP Console?

A. Create a new cloud storage bucket, and then enable Cloud CDN on it.
B. Create a new TCP load balancer, select the storage bucket as a backend, and then enable Cloud CDN on the backend.
C. Create a new SSL proxy load balancer, select the storage bucket as a backend, and then enable Cloud CDN on the backend.
D. Create a new HTTP load balancer, select the storage bucket as a backend, enable Cloud CDN on the backend, and make sure each object inside the storage bucket is shared publicly.

Answer: D

Explanation:
https://cloud.google.com/load-balancing/docs/https/adding-backend-buckets-to-load-balancers#using_cloud_cdn Cloud CDN needs HTTP(S) Load Balancers and Cloud Storage bucket has to be shared publicly.
https://cloud.google.com/cdn/docs/setting-up-cdn-with-bucket

NEW QUESTION 6

You created a new VPC network named Dev with a single subnet. You added a firewall rule for the network Dev to allow HTTP traffic only and enabled logging. When you try to log in to an instance in the subnet via Remote Desktop Protocol, the login fails. You look for the Firewall rules logs in Stackdriver Logging, but you do not see any entries for blocked traffic. You want to see the logs for blocked traffic.
What should you do?

A. Check the VPC flow logs for the instance.
B. Try connecting to the instance via SSH, and check the logs.
C. Create a new firewall rule to allow traffic from port 22, and enable logs.
D. Create a new firewall rule with priority 65500 to deny all traffic, and enable logs.

Answer: D

Explanation:
Ingress packets in VPC Flow Logs are sampled after ingress firewall rules. If an ingress firewall rule denies inbound packets, those packets are not sampled by VPC Flow Logs. We want to see the logs for blocked traffic so we have to look for them in firewall logs.
https://cloud.google.com/vpc/docs/flow-logs#key_properties

NEW QUESTION 7
You have enabled HTTP(S) load balancing for your application, and your application developers have reported that HTTP(S) requests are not being distributed correctly to your Compute Engine Virtual Machine instances. You want to find data about how the request are being distributed.
Which two methods can accomplish this? (Choose two.)

A. On the Load Balancer details page of the GCP Console, click on the Monitoring tab, select your backend service, and look at the graphs.
B. In Stackdriver Error Reporting, look for any unacknowledged errors for the Cloud Load Balancers service.
C. In Stackdriver Monitoring, select Resources > Metrics Explorer and search for https/request_bytes_count metric.
D. In Stackdriver Monitoring, select Resources > Google Cloud Load Balancers and review the Key Metrics graphs in the dashboard.
E. In Stackdriver Monitoring, create a new dashboard and track the https/backend_request_count metric for the load balancer.

Answer: AE

NEW QUESTION 8
You need to configure a Google Kubernetes Engine (GKE) cluster. The initial deployment should have 5 nodes with the potential to scale to 10 nodes. The maximum number of Pods per node is 8. The number of services could grow from 100 to up to 1024. How should you design the IP schema to optimally meet this requirement?

A. Configure a /28 primary IP address range for the node IP addresse
B. Configure a (25 secondary IP range for the Pod
C. Configure a /22 secondary IP range for the Services.
D. Configure a /28 primary IP address range for the node IP addresse
E. Configure a /25 secondary IP range for the Pod
F. Configure a /21 secondary IP range for the Services.
G. Configure a /28 primary IP address range for the node IP addresse
H. Configure a /28 secondary IP range for the Pod
I. Configure a /21 secondary IP range for the Services.
J. Configure a /28 primary IP address range for the node IP addresse
K. Configure a /24 secondary IP range for the Pad
L. Configure a /22 secondary IP range for the Services.

Answer: A

NEW QUESTION 9
You have a web application that is currently hosted in the us-central1 region. Users experience high latency when traveling in Asia. You've configured a network load balancer, but users have not experienced a performance improvement. You want to decrease the latency.
What should you do?

A. Configure a policy-based route rule to prioritize the traffic.
B. Configure an HTTP load balancer, and direct the traffic to it.
C. Configure Dynamic Routing for the subnet hosting the application.
D. Configure the TTL for the DNS zone to decrease the time between updates.

Answer: B

NEW QUESTION 10
You are maintaining a Shared VPC in a host project. Several departments within your company have infrastructure in different service projects attached to the Shared VPC and use Identity and Access Management (IAM) permissions to manage the cloud resources in those projects. VPC Network Peering is also set up between the Shared VPC and a common services VPC that is not in a service project. Several users are experiencing failed connectivity between certain instances in different Shared VPC service projects and between certain instances and the internet. You need to validate the network configuration to identify whether a misconfiguration is the root cause of the problem. What should you do?

A. Review the VPC audit logs in Cloud Logging for the affected instances.
B. Use Secure Shell (SSH) to connect to the affected Compute Engine instances, and run a series of PING tests to the other affected endpoints and the 8.8.8.8 IPv4 address.
C. Run Connectivity Tests from Network Intelligence Center to check connectivity between the affected endpoints in your network and the internet.
D. Enable VPC Flow Logs for all VPCs, and review the logs in Cloud Logging for the affected instances.

Answer: C

NEW QUESTION 10

Your company has provisioned 2000 virtual machines (VMs) in the private subnet of your Virtual Private Cloud (VPC) in the us-east1 region. You need to configure each VM to have a minimum of 128 TCP connections to a public repository so that users can download software updates and packages over the internet. You need to implement a Cloud NAT gateway so that the VMs are able to perform outbound NAT to the internet. You must ensure that all VMs can simultaneously connect to the public repository and download software updates and packages. Which two methods can you use to accomplish this? (Choose two.)

A. Configure the NAT gateway in manual allocation mode, allocate 2 NAT IP addresses, and update the minimum number of ports per VM to 256.
B. Create a second Cloud NAT gateway with the default minimum number of ports configured per VM to 64.
C. Use the default Cloud NAT gateway's NAT proxy to dynamically scale using a single NAT IP address.
D. Use the default Cloud NAT gateway to automatically scale to the required number of NAT IP addresses, and update the minimum number of ports per VM to 128.
E. Configure the NAT gateway in manual allocation mode, allocate 4 NAT IP addresses, and update the minimum number of ports per VM to 128.

Answer: AB

NEW QUESTION 14
Your organization's security policy requires that all internet-bound traffic return to your on-premises data center through HA VPN tunnels before egressing to the internet, while allowing virtual machines (VMs) to leverage private Google APIs using private virtual IP addresses 199.36.153.4/30. You need to configure the routes to enable these traffic flows. What should you do?

A. Configure a custom route 0.0.0.0/0 with a priority of 500 whose next hop is the default internet gateway.Configure another custom route 199.36.153.4/30 with priority of 1000 whose next hop is the VPN tunnel back to the on-premises data center.
B. Configure a custom route 0.0.0.0/0 with a priority of 1000 whose next hop is the internet gateway.Configure another custom route 199.36.153.4/30 with a priority of 500 whose next hop is the VPN tunnel back to the on-premises data center.
C. Announce a 0.0.0.0/0 route from your on-premises router with a MED of 1000. Configure a custom route 199.36.153.4/30 with a priority of 1000 whose next hop is the default internet gateway.
D. Announce a 0.0.0.0/0 route from your on-premises router with a MED of 500. Configure another custom route 199.36.153.4/30 with a priority of 1000 whose next hop is the VPN tunnel back to the onpremises data center.

Answer: A

NEW QUESTION 17
Your organization uses a Shared VPC architecture with a host project and three service projects. You have Compute Engine instances that reside in the service projects. You have critical workloads in your on-premises data center. You need to ensure that the Google Cloud instances can resolve on-premises hostnames via the Dedicated Interconnect you deployed to establish hybrid connectivity. What should you do?

A. Create a Cloud DNS private forwarding zone in the host project of the Shared VPC that forwards the private zone to the on-premises DNS servers.In your Cloud Router, add a custom route advertisement for the IP 35.199.192.0/19 to the on-premises environment.
B. Create a Cloud DNS private forwarding zone in the host project of the Shared VPC that forwards the Private zone to the on-premises DNS servers.In your Cloud Router, add a custom route advertisement for the IP 169.254 169.254 to the on-premisesenvironment.
C. Configure a Cloud DNS private zone in the host project of the Shared VPC.Set up DNS forwarding to your Google Cloud private zone on your on-premises DNS servers to point to the inbound forwarder IP address in your host projectIn your Cloud Router, add a custom route advertisement for the IP 169.254 169 254 to the on-premises environment.
D. Configure a Cloud DNS private zone in the host project of the Shared VPC.Set up DNS forwarding to your Google Cloud private zone on your on-premises DNS servers to point to the inbound forwarder IP address in your host project.Configure a DNS policy in the Shared VPC to allow inbound query forwarding with your on-premises DNS server as the alternative DNS server.

Answer: D

NEW QUESTION 21
You need to restrict access to your Google Cloud load-balanced application so that only specific IP addresses can connect.
What should you do?

A. Create a secure perimeter using the Access Context Manager feature of VPC Service Controls and restrict access to the source IP range of the allowed clients and Google health check IP ranges.
B. Create a secure perimeter using VPC Service Controls, and mark the load balancer as a service restricted to the source IP range of the allowed clients and Google health check IP ranges.
C. Tag the backend instances "application," and create a firewall rule with target tag "application" and the source IP range of the allowed clients and Google health check IP ranges.
D. Label the backend instances "application," and create a firewall rule with the target label "application" and the source IP range of the allowed clients and Google health check IP ranges.

Answer: C

Explanation:
https://cloud.google.com/load-balancing/docs/https/setting-up-https#sendtraffic

NEW QUESTION 25
You have a storage bucket that contains the following objects:
- folder-a/image-a-1.jpg
- folder-a/image-a-2.jpg
- folder-b/image-b-1.jpg
- folder-b/image-b-2.jpg
Cloud CDN is enabled on the storage bucket, and all four objects have been successfully cached. You want to remove the cached copies of all the objects with the prefix folder-a, using the minimum number of commands.
What should you do?

A. Add an appropriate lifecycle rule on the storage bucket.
B. Issue a cache invalidation command with pattern /folder-a/*.
C. Make sure that all the objects with prefix folder-a are not shared publicly.

D. Disable Cloud CDN on the storage bucke
E. Wait 90 second
F. Re-enable Cloud CDN on the storage bucket.

Answer: B

Explanation:
https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Invalidation.html

NEW QUESTION 26
Your company has a security team that manages firewalls and SSL certificates. It also has a networking team that manages the networking resources. The networking team needs to be able to read firewall rules, but should not be able to create, modify, or delete them.
How should you set up permissions for the networking team?

A. Assign members of the networking team the compute.networkUser role.
B. Assign members of the networking team the compute.networkAdmin role.
C. Assign members of the networking team a custom role with only the compute.networks.* and the compute.firewalls.list permissions.
D. Assign members of the networking team the compute.networkViewer role, and add the compute.networks.use permission.

Answer: B

NEW QUESTION 30
You created a VPC network named Retail in auto mode. You want to create a VPC network named Distribution and peer it with the Retail VPC.
How should you configure the Distribution VPC?

A. Create the Distribution VPC in auto mod
B. Peer both the VPCs via network peering.
C. Create the Distribution VPC in custom mod
D. Use the CIDR range 10.0.0.0/9. Create the necessary subnets, and then peer them via network peering.
E. Create the Distribution VPC in custom mod
F. Use the CIDR range 10.128.0.0/9. Create the necessary subnets, and then peer them via network peering.
G. Rename the default VPC as "Distribution" and peer it via network peering.

Answer: B

Explanation:
https://cloud.google.com/vpc/docs/vpc#ip-ranges

NEW QUESTION 35
You have applications running in the us-west1 and us-east1 regions. You want to build a highly available VPN that provides 99.99% availability to connect your applications from your project to the cloud services provided by your partner's project while minimizing the amount of infrastructure required. Your partner's services are also in the us-west1 and us-east1 regions. You want to implement the simplest solution. What should you do?

A. Create one Cloud Router and one HA VPN gateway in each region of your VPC and your partner's VP
B. Connect your VPN gateways to the partner's gateway
C. Enable global dynamic routing in each VPC.
D. Create one Cloud Router and one HA VPN gateway in the us-west1 region of your VP
E. Create one OpenVPN Access Server in each region of your partner's VP
F. Connect your VPN gateway to your partner's servers.
G. Create one OpenVPN Access Server in each region of your VPC and your partner's VP
H. Connect your servers to the partner's servers.
I. Create one Cloud Router and one HA VPN gateway in the us-west1 region of your VPC and your partner's VP
J. Connect your VPN gateways to the partner's gateways with a pair of tunnel
K. Enable global dynamic routing in each VPC.

Answer: A

NEW QUESTION 37
You created a new VPC for your development team. You want to allow access to the resources in this VPC via SSH only.
How should you configure your firewall rules?

A. Create two firewall rules: one to block all traffic with priority 0, and another to allow port 22 with priority 1000.
B. Create two firewall rules: one to block all traffic with priority 65536, and another to allow port 3389 with priority 1000.
C. Create a single firewall rule to allow port 22 with priority 1000.
D. Create a single firewall rule to allow port 3389 with priority 1000.

Answer: C

NEW QUESTION 39
You are creating an instance group and need to create a new health check for HTTP(s) load balancing. Which two methods can you use to accomplish this? (Choose two.)

A. Create a new health check using the gcloud command line tool.
B. Create a new health check using the VPC Network section in the GCP Console.
C. Create a new health check, or select an existing one, when you complete the load balancer’s backend configuration in the GCP Console.
D. Create a new legacy health check using the gcloud command line tool.
E. Create a new legacy health check using the Health checks section in the GCP Console.

Answer: AC

Explanation:
https://cloud.google.com/load-balancing/docs/health-checks#creating_and_modifying_health_checks

NEW QUESTION 43
Your company has just launched a new critical revenue-generating web application. You deployed the application for scalability using managed instance groups, autoscaling, and a network load balancer as frontend. One day, you notice severe bursty traffic that the caused autoscaling to reach the maximum number of instances, and users of your application cannot complete transactions. After an investigation, you think it as a DDOS attack. You want to quickly restore user access to your application and allow successful transactions while minimizing cost.
Which two steps should you take? (Choose two.)

A. Use Cloud Armor to blacklist the attacker's IP addresses.
B. Increase the maximum autoscaling backend to accommodate the severe bursty traffic.
C. Create a global HTTP(s) load balancer and move your application backend to this load balancer.
D. Shut down the entire application in GCP for a few hour
E. The attack will stop when the application is offline.
F. SSH into the backend compute engine instances, and view the auth logs and syslogs to further understand the nature of the attack.

Answer: BE

NEW QUESTION 45
Your on-premises data center has 2 routers connected to your GCP through a VPN on each router. All applications are working correctly; however, all of the traffic is passing across a single VPN instead of being load-balanced across the 2 connections as desired.
During troubleshooting you find:
•Each on-premises router is configured with the same ASN.
•Each on-premises router is configured with the same routes and priorities.
•Both on-premises routers are configured with a VPN connected to a single Cloud Router.
•The VPN logs have no-proposal-chosen lines when the VPNs are connecting.
•BGP session is not established between one on-premises router and the Cloud Router. What is the most likely cause of this problem?

A. One of the VPN sessions is configured incorrectly.
B. A firewall is blocking the traffic across the second VPN connection.
C. You do not have a load balancer to load-balance the network traffic.
D. BGP sessions are not established between both on-premises routers and the Cloud Router.

Answer: A

Explanation:
If the VPN logs show a no-proposal-chosen error, this error indicates that Cloud VPN and your peer VPN gateway were unable to agree on a set of ciphers. For IKEv1, the set of ciphers must match exactly. For IKEv2, there must be at least one common cipher proposed by each gateway. Make sure that you use supported ciphers to configure your peer VPN gateway.
https://cloud.google.com/network-connectivity/docs/vpn/support/troubleshooting#:~:text=If%20the%20VPN%2

NEW QUESTION 46
Your company has defined a resource hierarchy that includes a parent folder with subfolders for each department. Each department defines their respective project and VPC in the assigned folder and has the appropriate permissions to create Google Cloud firewall rules. The VPCs should not allow traffic to flow between them. You need to block all traffic from any source, including other VPCs, and delegate only the intra-VPC firewall rules to the respective departments.
What should you do?

A. Create a VPC firewall rule in each VPC to block traffic from any source, with priority 0.
B. Create a VPC firewall rule in each VPC to block traffic from any source, with priority 1000.
C. Create two hierarchical firewall policies per department's folder with two rules in each: a high-priority rule that matches traffic from the private CIDRs assigned to the respective VPC and sets the action to allow, and another lower-priority rule that blocks traffic from any other source.
D. Create two hierarchical firewall policies per department's folder with two rules in each: a high-priority rule that matches traffic from the private CIDRs assigned to the respective VPC and sets the action to goto_next, and another lower-priority rule that blocks traffic from any other source.

Answer: B

NEW QUESTION 51
You are configuring a new HTTP application that will be exposed externally behind both IPv4 and IPv6 virtual IP addresses, using ports 80, 8080, and 443. You will have backends in two regions: us-west1 and
us-east1. You want to serve the content with the lowest-possible latency while ensuring high availability and autoscaling, and create native content-based rules using the HTTP hostname and request path. The IP addresses of the clients that connect to the load balancer need to be visible to the backends. Which configuration should you use?

A. Use Network Load Balancing
B. Use TCP Proxy Load Balancing with PROXY protocol enabled
C. Use External HTTP(S) Load Balancing with URL Maps and custom headers
D. Use External HTTP(S) Load Balancing with URL Maps and an X-Forwarded-For header

Answer: D

NEW QUESTION 54
You suspect that one of the virtual machines (VMs) in your default Virtual Private Cloud (VPC) is under a denial-of-service attack. You need to analyze the incoming traffic for the VM to understand where the traffic is coming from. What should you do?

A. Enable Data Access audit logs of the VP

B. Analyze the logs and get the source IP addresses from the subnetworks.get field.
C. Enable VPC Flow Logs for the subne
D. Analyze the logs and get the source IP addresses from the connection field.
E. Enable VPC Flow Logs for the VP
F. Analyze the logs and get the source IP addresses from the src_location field.
G. Enable Data Access audit logs of the subne
H. Analyze the logs and get the source IP addresses from the networks.get field.

Answer: B

NEW QUESTION 57
You are configuring your Google Cloud environment to connect to your on-premises network. Your configuration must be able to reach Cloud Storage APIs and your Google Kubernetes Engine nodes across your private Cloud Interconnect network. You have already configured a Cloud Router with your Interconnect VLAN attachments. You now need to set up the appropriate router advertisement configuration on the Cloud Router. What should you do?

A. Configure the route advertisement to the default setting.
B. On the on-premises router, configure a static route for the storage API virtual IP address which points to the Cloud Router's link-local IP address.
C. Configure the route advertisement to the custom setting, and manually add prefix 199.36.153.8/30 to the list of advertisement
D. Leave all other options as their default settings.
E. Configure the route advertisement to the custom setting, and manually add prefix 199.36.153.8/30 to the list of advertisement
F. Advertise all visible subnets to the Cloud Router.

Answer: C

NEW QUESTION 59
Your company is working with a partner to provide a solution for a customer. Both your company and the partner organization are using GCP. There are applications in the partner's network that need access to some resources in your company's VPC. There is no CIDR overlap between the VPCs.
Which two solutions can you implement to achieve the desired results without compromising the security? (Choose two.)

A. VPC peering
B. Shared VPC
C. Cloud VPN
D. Dedicated Interconnect
E. Cloud NAT

Answer: AC

Explanation:
Google Cloud VPC Network Peering allows internal IP address connectivity across two Virtual Private Cloud (VPC) networks regardless of whether they belong to the same project or the same organization.

NEW QUESTION 64
You have configured Cloud CDN using HTTP(S) load balancing as the origin for cacheable content. Compression is configured on the web servers, but responses served by Cloud CDN are not compressed.
What is the most likely cause of the problem?

A. You have not configured compression in Cloud CDN.
B. You have configured the web servers and Cloud CDN with different compression types.
C. The web servers behind the load balancer are configured with different compression types.
D. You have to configure the web servers to compress responses even if the request has a Via header.

Answer: D

Explanation:
If responses served by Cloud CDN are not compressed but should be, check that the web server software running on your instances is configured to compress responses. By default, some web server software will automatically disable compression for requests that include a Via header. The presence of a Via header indicates the request was forwarded by a proxy. HTTP proxies such as HTTP(S) load balancing add a Via header to each request as required by the HTTP specification. To enable compression, you may have to override your web server's default configuration to tell it to compress responses even if the request had a Via header.

NEW QUESTION 68
You need to give each member of your network operations team least-privilege access to create, modify, and delete Cloud Interconnect VLAN attachments.
What should you do?

A. Assign each user the editor role.
B. Assign each user the compute.networkAdmin role.
C. Give each user the following permissions only: compute.interconnectAttachments.create, compute.interconnectAttachments.get.
D. Give each user the following permissions only: compute.interconnectAttachments.create, compute.interconnectAttachments.get, compute.routers.create, compute.routers.get, compute.routers.update.

Answer: D

Explanation:
https://cloud.google.com/interconnect/docs/how-to/dedicated/creating-vlan-attachments

NEW QUESTION 73
After a network change window one of your company’s applications stops working. The application uses an on-premises database server that no longer receives any traffic from the application. The database server IP address is 10.2.1.25. You examine the change request, and the only change is that 3 additional VPC

subnets were created. The new VPC subnets created are 10.1.0.0/16, 10.2.0.0/16, and 10.3.1.0/24/ The on-premises router is advertising 10.0.0.0/8.
What is the most likely cause of this problem?

A. The less specific VPC subnet route is taking priority.
B. The more specific VPC subnet route is taking priority.
C. The on-premises router is not advertising a route for the database server.
D. A cloud firewall rule that blocks traffic to the on-premises database server was created during the change.

Answer: B

NEW QUESTION 78
You are designing a shared VPC architecture. Your network and security team has strict controls over which routes are exposed between departments. Your Production and Staging departments can communicate with each other, but only via specific networks. You want to follow Google-recommended practices.
How should you design this topology?

A. Create 2 shared VPCs within the shared VPC Host Project, and enable VPC peering between the
B. Use firewall rules to filter access between the specific networks.
C. Create 2 shared VPCs within the shared VPC Host Project, and create a Cloud VPN/Cloud Router between the
D. Use Flexible Route Advertisement (FRA) to filter access between the specific networks.
E. Create 2 shared VPCs within the shared VPC Service Project, and create a Cloud VPN/Cloud Router between the
F. Use Flexible Route Advertisement (FRA) to filter access between the specific networks.
G. Create 1 VPC within the shared VPC Host Project, and share individual subnets with the Service Projects to filter access between the specific networks.

Answer: D

NEW QUESTION 79
You want to configure a NAT to perform address translation between your on-premises network blocks and GCP.
Which NAT solution should you use?

A. Cloud NAT
B. An instance with IP forwarding enabled
C. An instance configured with iptables DNAT rules
D. An instance configured with iptables SNAT rules

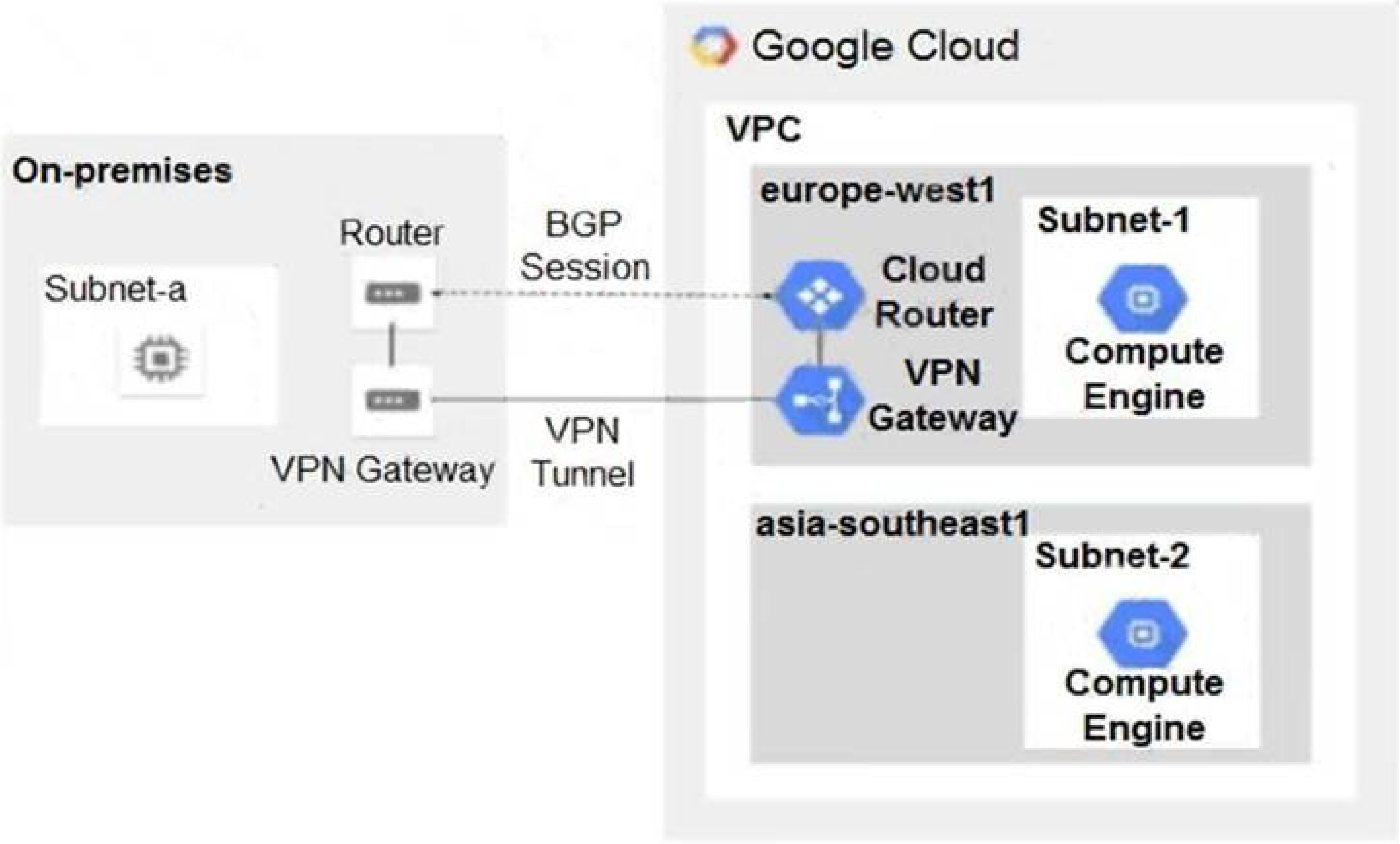
Answer: A

NEW QUESTION 80
You have an HA VPN connection with two tunnels running in active/passive mode between your Virtual Private Cloud (VPC) and on-premises network. Traffic over the connection has recently increased from 1 gigabit per second (Gbps) to 4 Gbps, and you notice that packets are being dropped. You need to configure your VPN connection to Google Cloud to support 4 Gbps. What should you do?

A. Configure the remote autonomous system number (ASN) to 4096.
B. Configure a second Cloud Router to scale bandwidth in and out of the VPC.
C. Configure the maximum transmission unit (MTU) to its highest supported value.
D. Configure a second set of active/passive VPN tunnels.

Answer: D

NEW QUESTION 83
You have the following routing design. You discover that Compute Engine instances in Subnet-2 in the asia-southeast1 region cannot communicate with compute resources on-premises. What should you do?



A. Configure a custom route advertisement on the Cloud Router.
B. Enable IP forwarding in the asia-southeast1 region.
C. Change the VPC dynamic routing mode to Global.
D. Add a second Border Gateway Protocol (BGP) session to the Cloud Router.

Answer: C

NEW QUESTION 88
You are configuring load balancing for a standard three-tier (web, application, and database) application. You have configured an external HTTP(S) load balancer for the web servers. You need to configure load balancing for the application tier of servers. What should you do?

A. Configure a forwarding rule on the existing load balancer for the application tier.
B. Configure equal cost multi-path routing on the application servers.
C. Configure a new internal HTTP(S) load balancer for the application tier.
D. Configure a URL map on the existing load balancer to route traffic to the application tier.

Answer: A

NEW QUESTION 93
You configured Cloud VPN with dynamic routing via Border Gateway Protocol (BGP). You added a custom route to advertise a network that is reachable over the VPN tunnel. However, the on-premises clients still cannot reach the network over the VPN tunnel. You need to examine the logs in Cloud Logging to confirm that the appropriate routers are being advertised over the VPN tunnel. Which filter should you use in Cloud Logging to examine the logs?

A. resource.type= “gce_router”
B. resource.type= “gce_network_region”
C. resource.type= “vpn_tunnel”
D. resource.type= “vpn_gateway”

Answer: C

NEW QUESTION 95
Your organization has a new security policy that requires you to monitor all egress traffic payloads from your virtual machines in region us-west2. You deployed an intrusion detection system (IDS) virtual appliance in the same region to meet the new policy. You now need to integrate the IDS into the environment to monitor all egress traffic payloads from us-west2. What should you do?

A. Enable firewall logging, and forward all filtered egress firewall logs to the IDS.
B. Enable VPC Flow Log
C. Create a sink in Cloud Logging to send filtered egress VPC Flow Logs to the IDS.
D. Create an internal TCP/UDP load balancer for Packet Mirroring, and add a packet mirroring policy filter for egress traffic.
E. Create an internal HTTP(S) load balancer for Packet Mirroring, and add a packet mirroring policy filter for egress traffic.

Answer: B

NEW QUESTION 99
You are configuring an HA VPN connection between your Virtual Private Cloud (VPC) and on-premises network. The VPN gateway is named VPN_GATEWAY_1. You need to restrict VPN tunnels created in the project to only connect to your on-premises VPN public IP address: 203.0.113.1/32. What should you do?

A. Configure a firewall rule accepting 203.0.113.1/32, and set a target tag equal to VPN_GATEWAY_1.
B. Configure the Resource Manager constraint constraints/compute.restrictVpnPeerIPs to use an allowList consisting of only the 203.0.113.1/32 address.
C. Configure a Google Cloud Armor security policy, and create a policy rule to allow 203.0.113.1/32.
D. Configure an access control list on the peer VPN gateway to deny all traffic except 203.0.113.1/32, and attach it to the primary external interface.

Answer: B

NEW QUESTION 101
You are designing a Partner Interconnect hybrid cloud connectivity solution with geo-redundancy across two metropolitan areas. You want to follow Google-recommended practices to set up the following region/metro pairs:
(region 1/metro 1)
(region 2/metro 2) What should you do?

A. Create a Cloud Router in region 1 with two VLAN attachments connected to metro1-zone1-x.Create a Cloud Router in region 2 with two VLAN attachments connected to metro1-zone2-x.
B. Create a Cloud Router in region 1 with one VLAN attachment connected to metro1-zone1-x.Create a Cloud Router in region 2 with two VLAN attachments connected to metro2-zone2-x.
C. Create a Cloud Router in region 1 with one VLAN attachment connected to metro1-zone2-x.Create a Cloud Router in region 2 with one VLAN attachment connected to metro2-zone2-x.
D. Create a Cloud Router in region 1 with one VLAN attachment connected to metro1-zone1-x and one VLAN attachment connected to metro1-zone2-x.Create a Cloud Router in region 2 with one VLAN attachment connected to metro2-zone1-x and one VLAN attachment to metro2-zone2-x.

Answer: B

NEW QUESTION 102
You recently configured Google Cloud Armor security policies to manage traffic to your application. You discover that Google Cloud Armor is incorrectly blocking some traffic to your application. You need to identity the web application firewall (WAF) rule that is incorrectly blocking traffic. What should you do?

A. Enable firewall logs, and view the logs in Firewall Insights.
B. Enable HTTP(S) Load Balancing logging with sampling rate equal to 1, and view the logs in Cloud Logging.

C. Enable VPC Flow Logs, and view the logs in Cloud Logging.
D. Enable Google Cloud Armor audit logs, and view the logs on the Activity page in the Google CloudConsole.

Answer: A

NEW QUESTION 106
You are migrating a three-tier application architecture from on-premises to Google Cloud. As a first step in the migration, you want to create a new Virtual Private Cloud (VPC) with an external HTTP(S) load balancer. This load balancer will forward traffic back to the on-premises compute resources that run the presentation tier. You need to stop malicious traffic from entering your VPC and consuming resources at the edge, so you must configure this policy to filter IP addresses and stop cross-site scripting (XSS) attacks. What should you do?

A. Create a Google Cloud Armor policy, and apply it to a backend service that uses an unmanaged instance group backend.
B. Create a hierarchical firewall ruleset, and apply it to the VPC's parent organization resource node.
C. Create a Google Cloud Armor policy, and apply it to a backend service that uses an internet network endpoint group (NEG) backend.
D. Create a VPC firewall ruleset, and apply it to all instances in unmanaged instance groups.

Answer: C

NEW QUESTION 108
You are creating a new application and require access to Cloud SQL from VPC instances without public IP addresses.
Which two actions should you take? (Choose two.)

A. Activate the Service Networking API in your project.
B. Activate the Cloud Datastore API in your project.
C. Create a private connection to a service producer.
D. Create a custom static route to allow the traffic to reach the Cloud SQL API.
E. Enable Private Google Access.

Answer: CE

Explanation:
https://cloud.google.com/sql/docs/mysql/configure-private-services-access#console_1
C: If you are using private IP for any of your Cloud SQL instances, you only need to configure private services access one time for every Google Cloud project that has or needs to connect to a Cloud SQL instance. If your Google Cloud project has a Cloud SQL instance, you can either configure it yourself or let Cloud SQL do it for you to use private IP. Cloud SQL configures private services access for you when all the conditions below are true:
https://cloud.google.com/sql/docs/postgres/configure-private-services-access#before_you_begin
E: You can enable Private Google access on a subnet level and any VMs on that subnet can access Google APIs by using their internal IP address.
https://cloud.google.com/vpc/docs/configure-private-google-access

NEW QUESTION 110
You want to set up two Cloud Routers so that one has an active Border Gateway Protocol (BGP) session, and the other one acts as a standby.
Which BGP attribute should you use on your on-premises router?

A. AS-Path
B. Community
C. Local Preference
D. Multi-exit Discriminator

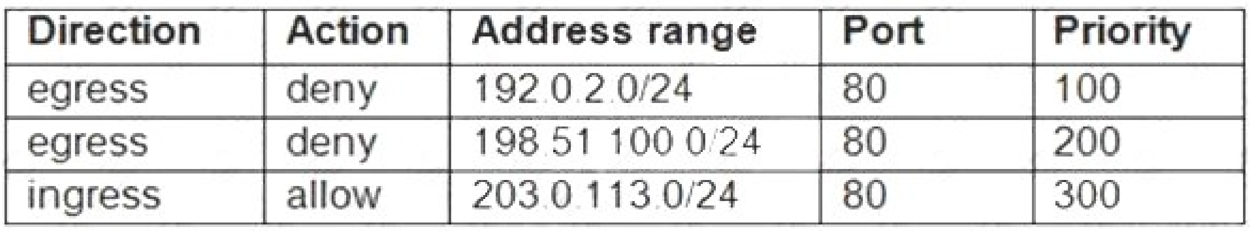
Answer: D

NEW QUESTION 112
You have several microservices running in a private subnet in an existing Virtual Private Cloud (VPC). You need to create additional serverless services that use Cloud Run and Cloud Functions to access the
microservices. The network traffic volume between your serverless services and private microservices is low. However, each serverless service must be able to communicate with any of your microservices. You want to implement a solution that minimizes cost. What should you do?

A. Deploy your serverless services to the serverless VP
B. Peer the serverless service VPC to the existing VP
C. Configure firewall rules to allow traffic between the serverless services and your existing microservices.
D. Create a serverless VPC access connector for each serverless servic
E. Configure the connectors to allow traffic between the serverless services and your existing microservices.
F. Deploy your serverless services to the existing VP
G. Configure firewall rules to allow traffic between the serverless services and your existing microservices.
H. Create a serverless VPC access connecto
I. Configure the serverless service to use the connector for communication to the microservices.

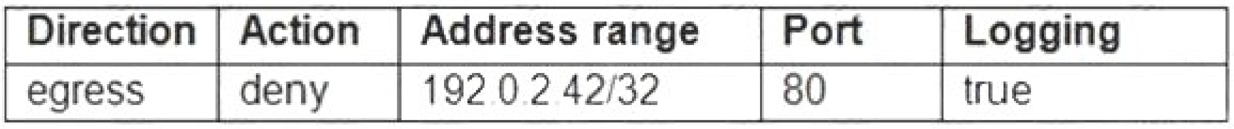
Answer: D

NEW QUESTION 116
You have the following firewall ruleset applied to all instances in your Virtual Private Cloud (VPC):



Direction	Action	Address range	Port	Priority
egress	deny	192.0.2.0/24	80	100
egress	deny	198.51.100.0/24	80	200
ingress	allow	203.0.113.0/24	80	300

You need to update the firewall rule to add the following rule to the ruleset:



Direction	Action	Address range	Port	Logging
egress	deny	192 0 2 42/32	80	true

You are using a new user account. You must assign the appropriate identity and Access Management (IAM) user roles to this new user account before updating the firewall rule. The new user account must be able to apply the update and view firewall logs. What should you do?

A. Assign the compute.securityAdmin and logging.viewer rule to the new user accoun
B. Apply the new firewall rule with a priority of 50.
C. Assign the compute.securityAdmin and logging.bucketWriter role to the new user accoun
D. Apply the new firewall rule with a priority of 150.
E. Assign the compute.orgSecurityPolicyAdmin and logging.viewer role to the new user accoun
F. Apply the new firewall rule with a priority of 50.
G. Assign the compute.orgSecurityPolicyAdmin and logging.bucketWriter role to the new user account.Apply the new firewall rule with a priority of 150.

Answer: A

NEW QUESTION 119
Your company has recently expanded their EMEA-based operations into APAC. Globally distributed users report that their SMTP and IMAP services are slow. Your company requires end-to-end encryption, but you do not have access to the SSL certificates.
Which Google Cloud load balancer should you use?

A. SSL proxy load balancer
B. Network load balancer
C. HTTPS load balancer
D. TCP proxy load balancer

Answer: D

Explanation:
https://cloud.google.com/security/encryption-in-transit/ Automatic encryption between GFEs and backends For the following load balancer types, Google automatically encrypts traffic between Google Front Ends (GFEs) and your backends that reside within Google Cloud VPC networks: HTTP(S) Load Balancing TCP Proxy Load Balancing SSL Proxy Load Balancing

NEW QUESTION 120
You have deployed an HTTP(s) load balancer, but health checks to port 80 on the Compute Engine virtual machine instance are failing, and no traffic is sent to your instances. You want to resolve the problem. Which commands should you run?

A. gcloud compute instances add-access-config instance-1
B. gcloud compute firewall-rules create allow-lb --network load-balancer --allow tcp --destination-ranges 130.211.0.0/22,35.191.0.0/16 --direction EGRESS
C. gcloud compute firewall-rules create allow-lb --network load-balancer --allow tcp --source-ranges 130.211.0.0/22,35.191.0.0/16 --direction INGRESS
D. gcloud compute health-checks update http health-check --unhealthy-threshold 10

Answer: A

NEW QUESTION 123
Your software team is developing an on-premises web application that requires direct connectivity to Compute Engine Instances in GCP using the RFC 1918 address space. You want to choose a connectivity solution from your on-premises environment to GCP, given these specifications:

- Your ISP is a Google Partner Interconnect provider.
- Your on-premises VPN device’s internet uplink and downlink speeds are 10 Gbps.
- A test VPN connection between your on-premises gateway and GCP is performing at a maximum speed of 500 Mbps due to packet losses.
- Most of the data transfer will be from GCP to the on-premises environment.
- The application can burst up to 1.5 Gbps during peak transfers over the Interconnect.
- Cost and the complexity of the solution should be minimal.

How should you provision the connectivity solution?

A. Provision a Partner Interconnect through your ISP.
B. Provision a Dedicated Interconnect instead of a VPN.
C. Create multiple VPN tunnels to account for the packet losses, and increase bandwidth using ECMP.
D. Use network compression over your VPN to increase the amount of data you can send over your VPN.

Answer: A

Explanation:
Direct Interconnect will be too expensive and also an overkill for this requirement. Managing multiple tunnels that too with packet loss consideration is complex also. Whereas partner interconnect fits the bill with providing required bandwidth but not super expensive also once setup not too complex too manage.

NEW QUESTION 124
You are the Organization Admin for your company. One of your engineers is responsible for setting up multiple host projects across multiple folders and sharing subnets with service projects. You need to enable the engineer's Identity and Access Management (IAM) configuration to complete their task in the fewest number of steps. What should you do?

A. Set up the engineer with Compute Shared VPC Admin IAM role at the folder level.
B. Set up the engineer with Compute Shared VPC Admin IAM role at the organization level.
C. Set up the engineer with Compute Shared VPC Admin IAM role and Project IAM Admin role at the folder level.

D. Set up the engineer with Compute Shared VPC Admin IAM role and Project IAM Admin role at the organization level.

Answer: B

NEW QUESTION 129
In your project my-project, you have two subnets in a Virtual Private Cloud (VPC): subnet-a with IP range 10.128.0.0/20 and subnet-b with IP range 172.16.0.0/24. You need to deploy database servers in subnet-a. You will also deploy the application servers and web servers in subnet-b. You want to configure firewall rules that only allow database traffic from the application servers to the database servers. What should you do?

A. Create network tag app-server and service account sa-db@my-project.iam.gserviceaccount.co
B. Add the tag to the application servers, and associate the service account with the database server
C. Run the following command:gcloud compute firewall-rules create app-db-firewall-rule \--action allow \--direction ingress \--rules top:3306 \--source-tags app-server \--target-service-accounts sa-db@my- project.iam.gserviceaccount.com
D. Create service accounts sa-app@my-project.iam.gserviceaccount.com andsa-db@my-project.iam.gserviceaccount.co
E. Associate service account sa-app with the application servers, and associate theservice account sa-db with the database server
F. Run the following command: gcloud compute firewall-rules create app-db-firewall-ru--allow TCP:3306 \--source-service-accounts sa-app@democloud-idp-demo.iam.gserviceaccount.com \--target-service-accounts sa-db@my- project.iam.gserviceaccount.com
G. Create service accounts sa-app@my-project.iam.gserviceaccount.com andsa-db@my-project.iam.gserviceaccount.co
H. Associate the service account sa-app with the application servers, and associatethe service account sa-db with the database server
I. Run the following command: gcloud compute firewall-rules create app-db-firewall-ru--allow TCP:3306 \--source-ranges 10.128.0.0/20 \--source-service-accounts sa-app@my- project.iam.gserviceaccount.com \--target-service-accounts sa-db@my- project.iam.gserviceaccount.com
J. Create network tags app-server and db-serve
K. Add the app-server tag to the application servers, and add the db-server tag to the database server
L. Run the following command:gcloud compute firewall-rules create app-db-firewall-rule \--action allow \--direction ingress \--rules tcp:3306 \--source-ranges 10.128.0.0/20 \--source-tags app-server \--target-tags db-server

Answer: D

NEW QUESTION 134
You need to create a GKE cluster in an existing VPC that is accessible from on-premises. You must meet the following requirements:

- IP ranges for pods and services must be as small as possible.
- The nodes and the master must not be reachable from the internet.
- You must be able to use kubectl commands from on-premises subnets to manage the cluster.

How should you create the GKE cluster?

A. • Create a private cluster that uses VPC advanced routes.•Set the pod and service ranges as /24.•Set up a network proxy to access the master.
B. • Create a VPC-native GKE cluster using GKE-managed IP ranges.•Set the pod IP range as /21 and service IP range as /24.•Set up a network proxy to access the master.
C. • Create a VPC-native GKE cluster using user-managed IP ranges.•Enable a GKE cluster network policy, set the pod and service ranges as /24.•Set up a network proxy to access the master.•Enable master authorized networks.
D. • Create a VPC-native GKE cluster using user-managed IP ranges.•Enable privateEndpoint on the cluster master.•Set the pod and service ranges as /24.•Set up a network proxy to access the master.•Enable master authorized networks.

Answer: D

Explanation:
Creating GKE private clusters with network proxies for controller access When you create a GKE private cluster with a private cluster controller endpoint, the cluster's controller node is inaccessible from the public internet, but it needs to be accessible for administration. By default, clusters can access the controller through its private endpoint, and authorized networks can be defined within the VPC network. To access the controller from on-premises or another VPC network, however, requires additional steps. This is because the VPC network that hosts the controller is owned by Google and cannot be accessed from resources connected through another VPC network peering connection, Cloud VPN or Cloud Interconnect. https://cloud.google.com/solutions/creating-kubernetes-engine-private-clusters-with-net-proxies

NEW QUESTION 136
Your company’s on-premises network is connected to a VPC using a Cloud VPN tunnel. You have a static route of 0.0.0.0/0 with the VPN tunnel as its next hop defined in the VPC. All internet bound traffic currently passes through the on-premises network. You configured Cloud NAT to translate the primary IP addresses of Compute Engine instances in one region. Traffic from those instances will now reach the internet directly from their VPC and not from the on-premises network. Traffic from the virtual machines (VMs) is not translating addresses as expected. What should you do?

A. Lower the TCP Established Connection Idle Timeout for the NAT gateway.
B. Add firewall rules that allow ingress and egress of the external NAT IP address, have a target tag that is on the Compute Engine instances, and have a priority value higher than the priority value of the default route to the VPN gateway.
C. Add a default static route to the VPC with the default internet gateway as the next hop, the network tag associated with the Compute Engine instances, and a higher priority than the priority of the default route to the VPN tunnel.
D. Increase the default min-ports-per-vm setting for the Cloud NAT gateway.

Answer: A

NEW QUESTION 141
You are developing an HTTP API hosted on a Compute Engine virtual machine instance that must be invoked only by multiple clients within the same Virtual Private Cloud (VPC). You want clients to be able to get the IP address of the service. What should you do?

A. Reserve a static external IP address and assign it to an HTTP(S) load balancing service's forwarding rul
B. Clients should use this IP address to connect to the service.
C. Ensure that clients use Compute Engine internal DNS by connecting to the instance name with the url https://[INSTANCE_NAME].[ZONE].c.[PROJECT_ID].internal/.
D. Reserve a static external IP address and assign it to an HTTP(S) load balancing service's forwardingrul
E. Then, define an A record in Cloud DN

F. Clients should use the name of the A record to connect to the service.
G. Ensure that clients use Compute Engine internal DNS by connecting to the instance name with the url https://[API_NAME]/[API_VERSION]/.

Answer: C

NEW QUESTION 142
You have configured a Compute Engine virtual machine instance as a NAT gateway. You execute the following command:

```
gcloud compute routes create no-ip-internet-route \
--network custom-network1 \
--destination-range 0.0.0.0/0 \
--next-hop instance nat-gateway \
--next-hop instance-zone us-central1-a \
--tags no-ip --priority 800
```

You want existing instances to use the new NAT gateway. Which command should you execute?

A. sudo sysctl -w net.ipv4.ip_forward=1
B. gcloud compute instances add-tags [existing-instance] --tags no-ip
C. gcloud builds submit --config=cloudbuild.waml --substitutions=TAG_NAME=no-ip
D. gcloud compute instances create example-instance --network custom-network1 \--subnet subnet-us-central \--no-address \--zone us-central1-a \--image-family debian-9 \--image-project debian-cloud \--tags no-ip

Answer: B

Explanation:
https://cloud.google.com/sdk/gcloud/reference/compute/routes/create
In order to apply a route to an existing instance we should use a tag to bind the route to it.

NEW QUESTION 146
Your organization has a Google Cloud Virtual Private Cloud (VPC) with subnets in us-east1, us-west4, and europe-west4 that use the default VPC configuration. Employees in a branch office in Europe need to access the resources in the VPC using HA VPN. You configured the HA VPN associated with the Google Cloud VPC for your organization with a Cloud Router deployed in europe-west4. You need to ensure that the users in the branch office can quickly and easily access all resources in the VPC. What should you do?

A. Create custom advertised routes for each subnet.
B. Configure each subnet’s VPN connections to use Cloud VPN to connect to the branch office.
C. Configure the VPC dynamic routing mode to Global.
D. Set the advertised routes to Global for the Cloud Router.

Answer: C

NEW QUESTION 149
You are using a third-party next-generation firewall to inspect traffic. You created a custom route of 0.0.0.0/0 to route egress traffic to the firewall. You want to allow your VPC instances without public IP addresses to access the BigQuery and Cloud Pub/Sub APIs, without sending the traffic through the firewall.
Which two actions should you take? (Choose two.)

A. Turn on Private Google Access at the subnet level.
B. Turn on Private Google Access at the VPC level.
C. Turn on Private Services Access at the VPC level.
D. Create a set of custom static routes to send traffic to the external IP addresses of Google APIs and services via the default internet gateway.
E. Create a set of custom static routes to send traffic to the internal IP addresses of Google APIs and services via the default internet gateway.

Answer: AD

Explanation:
https://cloud.google.com/vpc/docs/private-access-options#pga Private Google Access VM instances that only have internal IP addresses (no external IP addresses) can use Private Google Access. They can reach the_external IP addresses_ of Google APIs and services.

NEW QUESTION 154
You have provisioned a Dedicated Interconnect connection of 20 Gbps with a VLAN attachment of 10 Gbps. You recently noticed a steady increase in ingress traffic on the Interconnect connection from the on-premises data center. You need to ensure that your end users can achieve the full 20 Gbps throughput as quickly as possible. Which two methods can you use to accomplish this? (Choose two.)

A. Configure an additional VLAN attachment of 10 Gbps in another regio
B. Configure the on-premises router to advertise routes with the same multi-exit discriminator (MED).
C. Configure an additional VLAN attachment of 10 Gbps in the same regio
D. Configure the on-premises router to advertise routes with the same multi-exit discriminator (MED).
E. From the Google Cloud Console, modify the bandwidth of the VLAN attachment to 20 Gbps.
F. From the Google Cloud Console, request a new Dedicated Interconnect connection of 20 Gbps, and configure a VLAN attachment of 10 Gbps.
G. Configure Link Aggregation Control Protocol (LACP) on the on-premises router to use the 20-Gbps Dedicated Interconnect connection.

Answer: CE

NEW QUESTION 156
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